

**Listing of the Claims:**

The following is a complete listing of all the claims in the application, with an indication of the status of each:

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1 1 (Currently Amended). A distributed method for processing auction traffic  
2 using one or more servers at a plurality of nodes in a distributed processing  
3 system comprising the steps of:

4 using a computer implemented current local winner determination  
5 method at each of the nodes to ~~quickly~~ identify loser bids and candidate  
6 winning bids; and

7 using a computer implemented current global winner determination  
8 method to determine from the candidate winning bids from each of nodes a  
9 current set of winners.

1 2 (Original). The method of claim 1, wherein the auction is an open-cry  
2 auction.

1 3 (Currently Amended). ~~The~~ A distributed method of claim 2 for processing  
2 open-cry auction traffic using one or more servers at a plurality of nodes in a  
3 distributed processing system comprising the steps of:

4 using a current local winner determination method at each of the nodes  
5 to identify loser bids and candidate winning bids, wherein the current local  
6 winner determination method comprises the steps of:

7 (a) receiving a new bid( $v, q$ ) at a node, where  $v$  denotes the price per  
8 unit and  $q$  denotes the quantity desired;  
9 (b) checking to see if the new bid ranks in the top  $\lfloor N/q \rfloor$  bids, in terms  
10 of price/unit bid value, amongst all the bids asking for quantity  
11  $q$  whose information is available to this process, where  $N$  is a

12                    number of copies of a single item on sale and  $\lfloor x \rfloor$  stands for the  
13                    greatest integer less than or equal to  $x$ ;  
14                    (c) taking the new bid along with the set of  $\lfloor N/q \rfloor$  bids that have been  
15                    processed and determining a new set of top  $\lfloor N/q \rfloor$  bids;  
16                    (d) determining if  $\text{bid}(v,q)$  is in the top  $\lfloor N/q \rfloor$  bids and, if it is not,  
17                    declaring it a loser bid, but if so, declaring it a candidate bid;  
18                    and  
19                    using a current global winner determination method to determine from  
20                    the candidate winning bids from each of the nodes a current set of winners.

1                    4 (Original). The method of claim 3, further comprising the steps of:  
2                    holding the candidate bid at the node for a time,  $\tau$ ; and  
3                    if by time  $\tau$ , through an arrival of another bid, a candidate bid loses its  
4                    position amongst the top  $\lfloor N/q \rfloor$  highest bids, declaring the bid a loser bid;  
5                    otherwise, declaring the bid a winner candidate and making the bid  
6                    accessible for further processing by the current global winner determination  
7                    method.

1                    5 (Original). The method of claim 4, wherein the current global winner  
2                    determination method comprises the steps of:  
3                    receiving new candidate winning bid from a node  $\text{bid}(v,q)$ ;  
4                    taking the candidate winning bid along with the set of all bids that  
5                    have been processed and determines a new set of winners;  
6                    determining whether the new candidate  $\text{bid}(v,q)$  is a winner or a loser;  
7                    and  
8                    notifying the bidder of  $\text{bid}(v,q)$  as to whether they are a winner or  
9                    loser.

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1        6 (Currently Amended). ~~The~~ A distributed method of claim 2 for processing  
2        open-cry auction traffic using one or more servers at a plurality of nodes in a  
3        distributed processing system comprising the steps of:  
4                using a current local winner determination method at each of the nodes  
5        to identify loser bids and candidate winning bids, wherein the current local  
6        winner determination method comprises the steps of:  
7                (a) receiving a new bid( $v, q$ ) at a node, where  $v$  denotes the price per  
8                unit and  $q$  denotes the quantity desired;  
9                (b) considering a set of bids using a set of pre-specified auction rules  
10              and selecting winners for auctioning  $N+x$  copies of the item on  
11              sale; and  
12              (c) determining whether the bid( $v, q$ ) is a candidate winner bid; and  
13              using a current global winner determination method to determine from  
14        the candidate winning bids from each of the nodes a current set of winners.

1        7 (Original). The method of claim 6, wherein the current global winner  
2        determination method comprises the steps of:  
3                receiving new candidate winning bid from a node bid( $v, q$ );  
4                taking the candidate winning bid along with the set of all bids that  
5        have been processed and determines a new set of winners;  
6                determining whether the new candidate bid( $v, q$ ) is a winner or a loser;  
7        and  
8                notifying the bidder of bid( $v, q$ ) as to whether they are a winner or  
9        loser.

1        8 (Original). The method of claim 1, wherein the auction is a descending  
2        auction.

1 9 (Currently Amended). ~~The~~ A distributed method of claim 8 for processing  
2 descending auction traffic using one or more servers at a plurality of nodes in  
3 a distributed processing system comprising the steps of:  
4 using a current local winner determination method at each of the nodes  
5 to identify loser bids and candidate winning bids, wherein the current local  
6 winner determination method comprises the steps of:  
7 (a) receiving a bid ( $q$ ) for processing, where  $q$  is the quantity desired at  
8 going price  $p$ ;  
9 (b) determining whether the bid is in the first  $\lfloor R/q \rfloor$  bids, asking for  
10 quantity  $q$  at price  $p$ , where  $\lfloor x \rfloor$  stands for the greatest integer  
11 less than or equal to  $x$  and  $R$  is a currently remaining quantity  
12 on auction;  
13 (c) if the bid is in the first  $\lfloor R/q \rfloor$  bids, asking for quantity  $q$  at the going  
14 price  $p$ , then declaring the bid a candidate winner bid; and  
15 (d) making the candidate winner bid available for further processing  
16 by the current global winner determination method; and  
17 using a current global winner determination method to determine from  
18 the candidate winning bids from each of the nodes a current set of winners.

1 10 (Original). The method of claim 9, further comprising the steps of:  
2 giving bids processed by the method a time stamp of arrival; and  
3 determining whether the time stamp, if it exists on the bid, is greater  
4 than or equal to the time stamp of any bid, asking for quantity  $q$  at going price  
5  $p$ , that has been processed by the method in the past.

1 11 (New). The method of claim 1, wherein bidders submit multi-item bids and  
2 the bids may be indivisible.